

UL SYSTEM NO. F-A-2420

**CLOSET FLANGE AND DRAIN PIPING THROUGH CONCRETE FLOOR  
OR CONCRETE OVER METAL DECKING ASSEMBLY**

FA2420c.091925

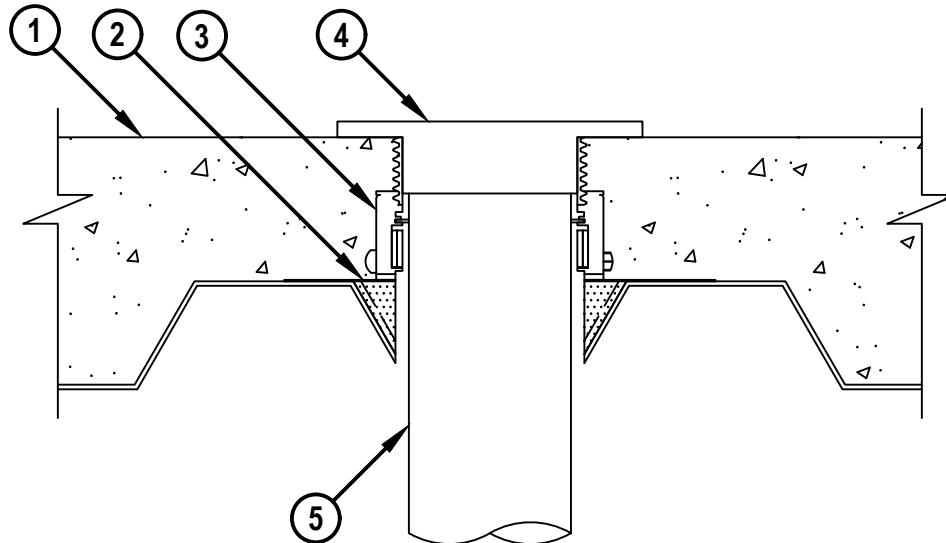
F-RATING = 2-HR.

T-RATING = 2-HR.

L-RATING AT AMBIENT = 1 CFM / SQ FT

L-RATING AT 400°F = 1 CFM / SQ FT

**CROSS-SECTIONAL VIEW**



HILTI, Inc.  
Plano, Texas USA (800) 879-8000

Sheet 1 of 2  
Scale 3/16" = 1"  
Date Sept. 19, 2025

Drawing No.  
**FA  
2420c**

*Saving Lives through Innovation and Education*

**CLOSET FLANGE AND DRAIN PIPING THROUGH CONCRETE FLOOR**  
**OR CONCRETE OVER METAL DECKING ASSEMBLY**

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T-RATING = 2-HR.

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1. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 4" THICK) OVER METAL DECKING ASSEMBLY (UL/cUL CLASSIFIED D700 OR D900 SERIES) WITH 2" OR 3" FLUTED DECKS (2-HR. FIRE-RATING). ALTERNATIVELY, THE FLOOR MAY CONSIST OF LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE (MINIMUM 2-1/2" THICK) WITH A MINIMUM 1-1/2" THICKNESS OF CONCRETE OR GROUT TOPPING EXTENDING MINIMUM 24" BEYOND PERIPHERY OF DRAIN FLANGE.
  - A. [NOT SHOWN] FLOOR ASSEMBLY MAY BE SPRAYED WITH SPRAY-APPLIED FIRE RESISTIVE MATERIAL AS DESCRIBED IN THE UL D700 SERIES DESIGN.
2. HILTI CFS-CID MD PLT [W2" OR W3"] METAL DECK PLATFORM SECURED TO DECK WITH ONE FASTENER IN EACH CORNER (SEE NOTE BELOW).
3. HILTI CFS-CID MD [P OR PX] 4"/[2.5" OR 4"] FIRESTOP CAST-IN DEVICE FOR METAL DECK SECURED TO HILTI CFS-CID MD PLT METAL DECK PLATFORM WITH SCREWS.

NOM PIPE DIAMETER	FIRESTOP DEVICE
1-1/2" TO 2"	CFS-CID MD P(X) 2"
3"	CFS-CID MD P(X) 4"
3"	CFS-CID MD P(X) 3"
4"	CFS-CID MD P(X) 4"

4. PVC DRAIN BODY WITH FLANGE EMBEDDED WITHIN CONCRETE FLOOR OR CONCRETE/GROUT TOPPING. DRAIN PROVIDED WITH BRASS OR CHROMED STEEL DRAIN STRAINER. DRAIN SIZED TO ACCOMMODATE DRAIN PIPE. PVC DRAIN INSERTED INTO FIRESTOP DEVICE WITH DRAIN FLANGE RESTING ON TOP EDGE OF DEVICE PRIOR TO INSTALLATION OF CONCRETE OR FLOOR TOPPING.
5. NOMINAL 4" DIAMETER PVC PLASTIC PIPE (SCHEDULE 40) (VENTED PIPING SYSTEM).

NOTES : 1. FOR CFS-CID MD P ONLY, AS AN ALTERNATIVE TO THE CFS-CID MD PLT METAL DECK PLATFORM, THE HILTI METAL DECK ADAPTER KIT MAY BE USED FOR CONCRETE OVER METAL DECKING CONDITIONS.

2. L-RATING APPLIES ONLY WHEN NOMINAL DIAMETER OF PIPE EQUALS SIZE OF DEVICE (2" PIPE IN 2" DEVICE, ETC.).



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Sheet	2 of 2
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